

Evidence-Based Clinical Practice Guideline on Antibiotic Use for the Urgent Management of Pulpal- and Periapical-Related Dental Pain and Intraoral Swelling: A Report from the American Dental Association

Summary of clinical recommendations for urgent situations in dental settings where definitive, conservative dental treatment¹ is **not immediately available**

GRADE Certainty of the Evidence

High	We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate	We are moderately confident in the effect estimate. The true effect is likely to be close to the estimate of the effect.
Low	Our confidence in the effect estimate is limited.
Very Low	We have very little confidence in the effect estimate.

GRADE Interpretation of Strength of Recommendations

Implications	Strong Recommendations	Conditional Recommendations
For Patients	Most individuals in this situation would want the recommended course of action and only a small proportion would not.	The majority of individuals in this situation would want the suggested course of action, but many would not.
For Clinicians	Most individuals should receive the intervention.	Recognize that different choices will be appropriate for individual patients and that you must help each patient arrive at a management decision consistent with his or her values and preferences.
For Policy Makers	The recommendation can be adapted as policy in most situations.	Policy making will require substantial debate and involvement of various stakeholders.

Expert Panel Recommendations and Good Practice Statement	Certainty of the Evidence	Strength of Recommendation
The expert panel recommends dentists do not prescribe oral systemic antibiotics for immunocompetent ² adults with symptomatic irreversible pulpitis³ with or without symptomatic apical periodontitis³ . Clinicians should refer ⁴ patients for definitive, conservative dental treatment ¹ while providing interim monitoring. ⁵	Low	Strong
The expert panel suggests dentists do not prescribe oral systemic antibiotics for immunocompetent ² adults with pulp necrosis and symptomatic apical periodontitis³ . Clinicians should refer ⁴ patients for definitive, conservative dental treatment ¹ while providing interim monitoring. ⁵ If definitive, conservative dental treatment is not feasible, a delayed prescription ⁶ for oral amoxicillin (500 mg, 3 times per d, 3–7 d) or oral penicillin V potassium (500 mg, 4 times per d, 3–7 d) ^{7,8,9} should be provided.	Very Low	Conditional
The expert panel suggests dentists prescribe oral amoxicillin (500 mg, 3 times per d, 3–7 d) or oral penicillin V potassium (500 mg, 4 times per d, 3–7 d) ^{7,8,9} for immunocompetent ² adults with pulp necrosis and localized acute apical abscess³ . Clinicians also should provide urgent referral ⁴ as definitive, conservative dental treatment ¹ should not be delayed. ⁵	Very Low	Conditional
Good practice statement: The expert panel suggests dentists prescribe oral amoxicillin (500 mg, 3 times per d, 3–7 d) or oral penicillin V potassium (500 mg, 4 times per d, 3–7 d) ^{7,8,9} for immunocompetent ² adults with pulp necrosis and acute apical abscess with systemic involvement³ . Clinicians also should provide urgent referral ⁵ as definitive, conservative dental treatment ¹ should not be delayed. ⁵ If the clinical condition worsens or if there is concern for deeper space infection or immediate threat to life, refer patient for urgent evaluation. ¹⁰		

1 Definitive, conservative dental treatment refers to pulpotomy, pulpectomy, nonsurgical root canal treatment, or incision for drainage of abscess. Extractions are not within the scope of this guideline. Only clinicians who are authorized or trained to perform the specified treatments should do so.

2 Immunocompetent is defined as the ability of the body to mount an appropriate immune response to an infection. Immunocompromised patients do not meet the criteria for this recommendation, and they can include, but are not limited to, patients with HIV with an AIDS-defining opportunistic illness, cancer, organ or stem cell transplants, and autoimmune conditions on immunosuppressive drugs.

3 For a description of the target pulpal and periapical conditions, refer to the associated clinical practice guideline.

4 Clinicians including dentists, dental hygienists, and other members of the dental care team may refer patients to an endodontist, oral and maxillofacial surgeon, or general dentist who is trained to perform definitive, conservative dental treatment.

5 Patients should be instructed to call if their condition deteriorates (progression of disease to a more severe state) or if the referral to receive definitive, conservative dental treatment within 1–2 d is not possible. Evidence suggests that nonsteroidal anti-inflammatory drugs and acetaminophen (specifically, 400–600 mg ibuprofen plus 1,000 mg acetaminophen) may be effective in managing dental pain.

6 Dentists should communicate to the patient that if their symptoms worsen and they experience swelling or pus formation, the delayed prescription should be filled. Delayed prescribing is defined by the Centers for Disease Control and Prevention as a prescription that is used for patients with conditions that usually resolve without treatment but who can benefit from antibiotics if the conditions do not improve.

7 Although the expert panel recommends both amoxicillin and penicillin V potassium as first-line treatments, amoxicillin is preferred over penicillin V potassium because it is more effective against various gram-negative anaerobes and is associated with lower incidence of gastrointestinal adverse effects.

8 Refer to the opposite side of this chairside guide and the associated clinical practice guideline for additional considerations when choosing the appropriate antibiotic for your patient. An antibiotic with a similar spectrum of activity to those recommended above can be continued if the antibiotic was initiated before the patient sought treatment. As with any antibiotic use, the patient should be informed about symptoms that may indicate lack of antibiotic efficacy and adverse drug events.

9 Clinicians should reevaluate patient within 3 d (for example, in-person visit or phone call). Dentists should instruct patient to discontinue antibiotics 24 h after patient's symptoms resolve, irrespective of reevaluation after 3 d.

10 Urgent evaluation will most likely be conducted in an urgent care setting or an emergency department.

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